IN THE CLAIMS

Following is a complete and revised listing of the claims, marked with status identifiers in parentheses, underlines indicating insertions, and strikethroughs or double-brackets indicating deletions. This listing is to replace all prior listings of the claims.

1. (Currently Amended) A method of coating a gas turbine blade with a metallic anti-oxidation coating in ~~a~~ one single vacuum plant, the plant including a coating region separate from a postheat region, the method comprising:

heating the gas turbine blade, brought into the vacuum plant and subjected to a vacuum ~~while in a vacuum in the vacuum plant~~, from room temperature to a gas turbine blade temperature, ~~while in a~~ the gas turbine blade being permanent in a vacuum in the vacuum plant,

applying the metallic anti-oxidation coating to the gas turbine blade ~~while~~ being permanent in a vacuum, wherein the anti-oxidation coating ~~being applied in a coating region of the vacuum plant, and the application of the anti-oxidation coating~~ causes the temperature of the gas turbine blade to drop, but not to a room temperature level, and

transferring the coated gas turbine blade from the coating region to a postheat region of the vacuum plant without interruption of the vacuum,

subjecting the coated gas turbine blade to a postheat treatment ~~while~~ being permanent in a vacuum, wherein the postheat treatment follows the application of the coating in such a way that the temperature of the gas turbine blade, after the application of the coating and before the postheat treatment, is at least equal to a minimum temperature, the minimum

temperature being higher than room temperature, and ~~includes~~ wherein ~~-transferring-~~the coated gas turbine blade is thereafter transferred from the ~~coating region to a postheat region of the~~ vacuum plant.

2. (Previously Presented) The method as claimed in claim 1, wherein the minimum temperature is about 500 K.

3. (Currently Amended) The method as claimed in claim 1, wherein, the coating region and the postheat treatment region are different regions of the vacuum plant.

4. (Previously Presented) The method as claimed in claim 3, wherein the coated gas turbine blade is automatically transferred from the coating region into the postheat treatment region.

5. (Previously Presented) The method as claimed in claim 1, further comprising:

cooling down the gas turbine blade subjected to postheat treatment, to room temperature in a controlled manner.

6. (Currently Amended) The method as claimed in claim 3, wherein a first number of gas turbine blades is located in the coating region and simultaneously, a second number of gas turbine blades is located in the postheat treatment region, the second number being larger than the first number.

7. (Previously Presented) The method as claimed in claim 1, wherein a material used for the gas turbine blade is one of a nickel-, iron-, or cobalt-base superalloy.

8. (Previously Presented) The method as claimed in claim 1, wherein the metallic anti-oxidation coating is an MCrAlX alloy, where M stands for one or more elements of the group including iron, cobalt and nickel; Cr stands for chromium; Al stands for aluminum; and X stands for one or more elements of the group including yttrium, rhenium and the elements of the rare earths.

9. (Currently Amended) An apparatus for coating a gas turbine blade with a metallic anti-oxidation coating in ~~a~~ one single vacuum plant, comprising:

a coating chamber; and

a postheat treatment chamber, wherein the postheat treatment chamber is connected to the coating chamber such that a gas turbine blade is transferable from the coating chamber to the postheat chamber without interruption of the vacuum, and wherein ~~and~~ both chambers are maintained in ~~a~~ permanent vacuum such that the gas turbine blade is maintainable permanent in vacuum from a time of entry into the vacuum plant until a time of exit from the vacuum plant.

10. ((Previously Presented) The apparatus as claimed in claim 9, wherein a heating device is provided in the postheat treatment chamber.

11. (Previously Presented) The apparatus as claimed in claim 9, further comprising:

a preheating chamber, the preheating chamber being arranged upstream of the coating chamber and being connected to the coating chamber in a vacuum-tight manner.

12. (Previously Presented) The apparatus as claimed in claim 9, further comprising:

a cooling chamber, the cooling chamber being arranged downstream of the postheat treatment chamber and being connected to the postheat treatment chamber in a vacuum-tight manner.

13. (Previously Presented) The apparatus as claimed in claim 9, wherein the connection between the coating chamber and the postheat treatment chamber is produced via a lock chamber.

14. (Previously Presented) The apparatus as claimed in claim 13, wherein a heating device is provided in the lock chamber.

15. (Previously Presented) The apparatus as claimed in claim 9, further comprising:

a transfer system for the automatic transfer of the gas turbine blade from one chamber into another chamber of the vacuum plant.

16. (Previously Presented) The apparatus as claimed in claim 9, wherein the coating chamber includes a first receiving capacity and the postheat treatment chamber includes a second

receiving capacity for gas turbine blades, the second receiving capacity being greater than the first receiving capacity.

17. (Previously Presented) The method of claim 1, wherein the minimum temperature ranges from about 900K to about 1400 K.

18. (Previously Presented) The method as claimed in claim 2, wherein the application of the metallic coating to the gas turbine blade is effected in a coating region of the vacuum plant and the postheat treatment is effected in a postheat treatment region of the vacuum plant, the coating region and the postheat treatment region being different regions of the vacuum plant.

19. (Previously Presented) The apparatus as claimed in claim 11, further comprising:

a cooling chamber, the cooling chamber being arranged downstream of the postheat treatment chamber and being connected to the postheat treatment chamber in a vacuum-tight manner.

20. (Previously Presented) The apparatus as claimed in claim 11, wherein the vacuum-tight connection between the coating chamber and the postheat treatment chamber is produced via a lock chamber.

21. (Previously Presented) The apparatus as claimed in claim 12, wherein the vacuum-tight connection between the coating chamber and the postheat treatment chamber is produced via a lock chamber.

22. (Previously Presented) The apparatus as claimed in claim 11, wherein a heating device is provided in the lock chamber.

23. (Previously Presented) The apparatus as claimed in claim 12, wherein a heating device is provided in the lock chamber.

24. (Previously Presented) The apparatus as claimed in claim 19, wherein a heating device is provided in the lock chamber.

25. (Previously Presented) The apparatus as claimed in claim 20, wherein a heating device is provided in the lock chamber.

26. (Previously Presented) The apparatus as claimed in claim 21, wherein a heating device is provided in the lock chamber.

27. (Previously Presented) The method as claimed in claim 5, wherein the metallic anti-oxidation coating is an MCrAlX alloy, where M stands for one or more elements of the group including iron, cobalt and nickel; Cr stands for chromium; Al stands for aluminum;

and X stands for one or more elements of the group including yttrium, rhenium and the elements of the rare earths.

28. (Previously Presented) The method as claimed in claim 7, wherein the metallic anti-oxidation coating is an MCrAlX alloy, where M stands for one or more elements of the group including iron, cobalt and nickel; Cr stands for chromium; Al stands for aluminum; and X stands for one or more elements of the group including yttrium, rhenium and the elements of the rare earths.

29. (Previously Presented) The apparatus as claimed in claim 11, wherein the vacuum-tight connection between the coating chamber and the preheating chamber is produced via a lock chamber.

30. (Previously Presented) The apparatus as claimed in claim 12, wherein the vacuum-tight connection between the cooling chamber and the postheat treatment chamber is produced via a lock chamber.

31. (Previously Presented) The apparatus as claimed in claim 29, wherein a heating device is provided in the lock chamber.

32. (Previously Presented) The apparatus as claimed in claim 30, wherein a heating device is provided in the lock chamber.

33. (Currently Amended) A vacuum plant, comprising:

a coating chamber, wherein a gas turbine blade is <u>adapted to be</u> coated with a metallic anti-oxidation coating while in a vacuum; and

a postheat treatment chamber, wherein the coated gas turbine blade is <u>adapted to be</u> subjected to heat treatment while in a vacuum, <u>and</u>

<u>a lock chamber</u> wherein a temperature of the gas turbine blade, after coating and before postheat treatment, is at least equal to a minimum temperature which is higher than at room temperature<u>, wherein the gas turbine blade is transferable from the coating chamber to the postheat chamber without interruption of the vacuum, and wherein all chambers are maintained in permanent vacuum such that the gas turbine blade is maintainable permanent in vacuum from a time of entry into the vacuum plant until a time of exit from the vacuum plant.</u>

34. (Previously Presented) The vacuum plant of claim 33, wherein the minimum temperature is about 500 K.

35. (Previously Presented) The vacuum plant of claim 33, wherein the minimum temperature ranges from about 900K to about 1400 K.

36. (Previously Presented) The vacuum plant of claim 33,, wherein the coating chamber and the postheat treatment chamber are connected in a vacuum tight manner.

37. (Previously Presented) The vacuum plant of claim 36, further comprising:

a preheating chamber, the preheating chamber being arranged upstream of the coating chamber and being connected to the coating chamber in a vacuum-tight manner.

38. (Previously Presented) The vacuum plant of claim 36, further comprising:

a cooling chamber, the cooling chamber being arranged downstream of the postheat treatment chamber and being connected to the postheat treatment chamber in a vacuum-tight manner.

39. (Previously Presented) The vacuum plant of claim 37, further comprising:

a cooling chamber, the cooling chamber being arranged downstream of the postheat treatment chamber and being connected to the postheat treatment chamber in a vacuum-tight manner.

40. (Previously Presented) The vacuum plant of claim 36, wherein the vacuum-tight connection between the coating chamber and the postheat treatment chamber is produced via a lock chamber.

41. (Previously Presented) The vacuum plant of claim 36, further comprising:

a transfer system for the automatic transfer of the gas turbine blade from one chamber into another chamber of the vacuum plant.

42. (Previously Presented) The vacuum plant of claim 37, further comprising:

a transfer system for the automatic transfer of the gas turbine blade from one chamber into another chamber of the vacuum plant.

43. (Previously Presented) The vacuum plant of claim 38, further comprising:

a transfer system for the automatic transfer of the gas turbine blade from one chamber into another chamber of the vacuum plant.

44. (New) A method of coating a gas turbine blade with a metallic anti-oxidation coating in one single vacuum plant, the plant including a coating region, a postheat region, and a lock chamber connecting the coating region and the postheat region, the method comprising:

heating the gas turbine blade, brought into the vacuum plant and subjected to a vacuum, from room temperature to a gas turbine blade temperature, the gas turbine blade being permanent in a vacuum in the vacuum plant,

applying the metallic anti-oxidation coating to the gas turbine blade being permanent in a vacuum, wherein the anti-oxidation coating causes the temperature of the gas turbine blade to drop, but not to a room temperature level,

transferring the coated gas turbine blade from the coating region to a lock chamber wherein a temperature of the gas turbine blade, after coating and before postheat treatment, is at least equal to a minimum temperature which is higher than at room temperature,

transferring the coated gas turbine blade from the lock chamber to the postheat region of the vacuum plant without interruption of the vacuum, and

subjecting the coated gas turbine blade to a postheat treatment being permanent in a vacuum, and wherein the coated gas turbine blade is thereafter transferred from the vacuum plant.